

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION		DOCKET No.:	53376
OF:	GRAMMENOS ET AL.	CONFIRMATION No.:	1295
SERIAL No.	10/509,112	GROUP ART UNIT:	1616
FILED:	SEPTEMBER 27, 2004	EXAMINER:	A. N. PRYOR
FOR:	PHENYLACRYLAMIDE, METHODS FOR THE PRODUCTION THEREOF AND AGENTS CONTAINING THEM		

Honorable Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Sir:

Applicants respectfully request review of the final rejection in the above-identified application dated July 03, 2007. No amendments are being filed with this request. This request is being filed with a notice of appeal. The review is requested for the reasons stated on the attached sheets.

The Status of Claims is as follows: Claims 1 to 21 are currently pending; Claims 9 and 17 stand allowed; Claims 1 to 5, 10 to 14 and 18 to 21 stand rejected, and Claims 6 to 8, 15 and 16 stand objected to. No claim(s) is(are) canceled. No claim(s) has(have) been withdrawn.

Please charge any shortage in fees due in connection with the filing of this paper, including Extension of Time fees, to Deposit Account No. 14.1437. Please credit any excess fees to such deposit account.

Respectfully submitted,
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REMARKS

Claims 1 to 5, 10 to 14 and 18 to 21 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable in light of the teaching of *Seitz et al.* (WO 96/17825). The Examiner argued inter alia:

- (a) “*Seitz suggests a compound of formula I where Ar² is a phenyl that is substituted with 2 alkoxy groups, A¹, A² and A³ = H, m = 2, E is =CHR¹ where the position 1 on the moiety bares [sic] alkyl (Me, Et, Pr), G = bond, and Z = halogen, alkyl (Me, Et, Pr) or alkoxy (O-Me, O-Et, O-Pr). The substitution on the heteroaryl can be halogen, alkyl, etc. This compound taught by Seitz is equivalent to compound of instant formula I in the instant claims;*”¹⁾ and
- (b) “*The fact that Seitz teaches a number of substituents, including the substituents which would lead to the instant group of compounds, makes the instant group of compounds obvious.*”²⁾

The Examiner’s rejection is deemed to be based on error because the teaching of *Seitz et al.* fails to suggest the selection and combination of elements which is made by the Examiner in (a). As such, the respective argument is deemed to be based on hindsight vision afforded by applicants’ invention. However, when applying 35 U.S.C. §103, it is inter alia necessary that references be viewed without the benefit of impermissible hindsight vision afforded by the claimed invention,³⁾ i.e., in determining obviousness the decisionmaker has to return to the time at which the invention was made.⁴⁾

At the least, the teaching of *Seitz et al.* is insufficient to suggest the combination which is necessary for the grouping -Ar¹-G-Z of the prior art formula to resemble the optionally fused 5- or 6-membered heteroaromatic ring which optionally carries up to three substituents selected from halogen, C₁-C₄-alkyl, C₁-C₄-haloalkoxy, C₁-C₄-haloalkyl and C₁-C₄-alkoxy which is represented by “Het” in applicants’ formula (I).

A person having ordinary skill in the pertinent art who considered the teaching of *Seitz et al.* as a whole, would have been fully aware of the distinction which is made by the authors between (a broad variety of) optional substituents of Ar¹ and the mandatory moiety -G-Z which particularly represents radicals in which

G is taken by bridging groups such as oxygen and sulfur, or certain optionally substituted dime-

1) Final Office action page 2, lines 12 to 18.

2) Final Office action page 3, lines 18 to 20.

3) *Hodosh v. Block Drug Co., Inc.*, 786 F.2d 1136, 1143 n.5, 229 USPQ 182, 187 n.5 (Fed. Cir. 1986).

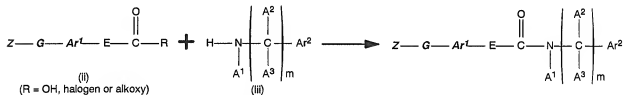
4) E.g. *Uniroyal, Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 5 USPQ2d 1434 (Fed. Cir. 1988), cert. denied, 488 U.S. 825 (1988); *Gillette Co. v. S.C. Johnson & Son, Inc.*, 919 F.2d 720, 16 USPQ2d 1923 (Fed. Cir. 1990).

thylene (ethane-1,2-diyl) and ethene-1,2-diyl groups, or a group such as $-\text{CQ}-\text{Q}-$, $-\text{CH}_2-\text{Q}-$; $-\text{Q}-\text{CH}_2-$, $-\text{CQ}-\text{Q}-\text{CH}_2-$, $-\text{Q}-\text{CQ}-\text{Q}-\text{CH}_2-$, $-\text{N}=\text{N}-$, $-\text{S}(\text{O})_n-\text{CH}_2-$, $-\text{C}(\text{R}^7)=\text{N}-\text{O}-$, $-\text{C}(\text{R}^7)=\text{N}-\text{O}-\text{CH}_2-$, $-\text{N}(\text{R}^8)-\text{CQ}-$, $-\text{Q}-\text{CQ}-\text{N}(\text{R}^8)-$, $-\text{N}=\text{C}(\text{R}^7)-\text{Q}-\text{CH}_2-$, $-\text{CH}_2-\text{O}-\text{N}=\text{C}(\text{R}^7)-$, $-\text{N}(\text{R}^8)-\text{CQ}-\text{Q}-$, $-\text{CQ}-\text{N}(\text{R}^8)-\text{CQ}-\text{Q}-$, $-\text{N}(\text{R}^8)-\text{CQ}-\text{Q}-\text{CH}_2-$, $-\text{Q}-\text{C}(\text{R}^7)=\text{N}-\text{O}-$ or $-\text{N}(\text{R}^8)-\text{c}(\text{R}^7)=\text{N}-\text{O}-\text{CH}_2-$, and

Z in turn represents certain optionally substituted aromatic radicals.

The respective combination of a certain bridge $-\text{G}-$ and an aromatic radical $-\text{Z}$ as a bridgehead which is suggested by the reference is not only illustrated in the particular, the preferred, and the illustrative embodiments. The respective combination is equally found in the art which *Seitz et al.* reflect at the outset of their disclosure, namely EP 398 692, EP 468 775, DE 40 30 038 (*also published as EP 477 631*), and WO 92/13830.⁵⁾ In light of the background art cited by *Seitz et al.*, as well as the particular, the preferred, and the illustrative embodiments set forth in the reference, it is immediately apparent to a person of ordinary skill in the fungicidal art that *Seitz et al.*'s teaching pertains to compounds which belong to the class of strobilurin fungicides, i.e. fungicidal compounds which comprise a phenyl ring (*corresponding to Ar¹ of Seitz et al.'s formula (1)*), which carries a certain moiety which corresponds to the group $-\text{G}-\text{Z}$ of *Seitz et al.*'s formula (1), and the respective moiety is generally in ortho-position to a radical corresponding to $-\text{E}-$ of *Seitz et al.*'s formula.

This understanding is further supported by various background art references which are mentioned by *Seitz et al.* in the section addressing the manufacture of their compounds (1). The compounds (1) are obtained according to *Seitz et al.* by reacting a carboxylic acid derivative with an amine, designated herein as (ii) and (iii), respectively:⁶⁾



The starting materials (ii) are stated to be known and/or obtainable in accordance with known procedures, and *Seitz et al.* specifically refer in this context to EP 178 826, EP 242 081, EP 382 375, EP 493 711, EP 432 503 and DE 39 38 054.⁷⁾ Again, the compounds referenced in these documents are built up similar to the compounds which are mentioned in the art referenced at the outset of *Seitz et al.*'s teaching and equally pertain to the field of strobilurin fungicides: the back-

5) Copies of the cover pages of the respective background art of *Seitz et al.*'s teaching were enclosed with applicants' paper dated October 03, 2007.

6) E.g. page 4, indicated lines 1 to 9, and page 24, indicated line 23 et seq., of WO 96/17825.

7) Cf. page 24, indicated lines 31 to 33, of WO 96/17825.

ground art compounds comprise a phenyl ring (corresponding to Ar^1 of *Seitz et al.*'s formula (1)), which carries a certain moiety which corresponds to the group -G-Z of *Seitz et al.*'s formula (1), and the respective grouping is generally indicated to be in ortho-position to a radical corresponding to -E- of *Seitz et al.*'s formula.

A person having ordinary skill in the art to which the teaching of *Seitz et al.* pertains was, clearly, fully aware of the structural significance of the particular unit which corresponds to the group -G-Z of *Seitz et al.* Such a person was, therefore, directed by the reference to turn to a selection and combination of specifically those radicals mentioned in the definitions of -G- and Z of *Seitz et al.*'s formula which yield the requisite structural particularities, e.g., the combination of a bridging moiety (-G-) with an aromatic ring as the bridgehead (-Z). In light of the significance of the particular structural unit which is represented by -G-Z of *Seitz et al.*'s formula, a person of ordinary skill in the art would not have been motivated by the reference to make a selection and combination of radicals upon which the Examiner relies in his argument.

The radicals which are allowed as substituents of the group "Het" of applicants' formula (I), namely halogen, C_1-C_4 -alkyl, C_1-C_4 -haloalkoxy, C_1-C_4 -haloalkyl and C_1-C_4 -alkoxy, clearly lack the structural particularities of the -G-Z ortho-substituent generally found in strobilurin fungicides. As such, the situation here is deemed to resemble the circumstances which were before the Federal Circuit in the decision in *In re Baird*⁸⁾ where a prior art reference disclosed a generic formula encompassing the claimed composition. The Court found that the reference did not provide the requisite motivation to select the claimed composition because the reference (a) disclosed a vast number of possibilities, and (b) gave as "preferred" and "optimum" examples which were different from, and more complex than, the claimed composition. In fact, the Court noted that the reference appeared to teach away from the selection of the claimed composition by focusing on the more complex examples.

Seitz et al. disclose a vast number of possibilities, in particular regarding the groups represented by -E-, $-Ar^1$ -, -G-, and -Z, which allow for distinctly different structures of the moiety $-E-Ar^1-G-Z$ of *Seitz et al.*'s formula. Additionally, the reference indicates preferred and particularly preferred examples of the moiety $-E-Ar^1-G-Z$, all of which are different from, and structurally by far more complex than, the radicals which are allowed as substituents of the group "Het" of applicants' formula (I), namely halogen, C_1-C_4 -alkyl, C_1-C_4 -haloalkoxy, C_1-C_4 -haloalkyl and C_1-C_4 -alkoxy. The teaching of *Seitz et al.* can, in light of the Court's holding in *In re Baird*, not be deemed to render applicants' compounds (I) prima facie obvious. In fact, under the respec-

8) *In re Baird*, 16 F.3d 380, 29 USPQ2d 1550 (Fed. Cir. 1994).

tive holding of the Court, the teaching of *Seitz et al.* can be deemed to teach away from the selection of substituents such as halogen, C₁-C₄-alkyl, C₁-C₄-haloalkoxy, C₁-C₄-haloalkyl and C₁-C₄-alkoxy by focusing on the more complex examples.

The Examiner's position in (b) is also not deemed to be well taken. The patentability of a claim to a specific compound or subgenus embraced by a prior art genus should be analyzed no differently than any other claim for purposes of 35 U.S.C. §103. "*The section 103 requirement of unobviousness is no different in chemical cases than with respect to other categories of patentable inventions.*"⁹⁾ A determination of patentability under 35 U.S.C. §103 should be made upon the facts of the particular case in view of the totality of the circumstances.¹⁰⁾ "*The fact that a claimed compound may be encompassed by a disclosed generic formula does not by itself render that compound obvious,*"¹¹⁾ and the Federal Circuit has "*decline[d] to extract from Merck[& Co. v. Biocraft Laboratories Inc., 874 F.2d 804, 10 USPQ2d 1843 (Fed. Cir. 1989)] the rule that ... regardless of how broad, a disclosure of a chemical genus renders obvious any species that happens to fall within it.*"¹²⁾ The motivation to make the proposed substitution, combination, or other modification of the prior art must flow from some teaching in the art that suggests *the desirability or incentive* to make the combination which is needed to arrive at the claimed invention,¹³⁾ the strongest rationale for combining prior art elements in the manner needed being a recognition, expressly or impliedly in the prior art or drawn from a convincing line of reasoning based on established scientific principles or legal precedent, that some advantage or expected beneficial result would have been produced by their combination.¹⁴⁾

The United States Supreme Court recently reiterated: "*Under §103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are*

9) *In re Papesch*, 315 F.2d 381, 385, 137 USPQ 43, 47 (CCPA 1963).

10) See, e.g., *In re Dillon*, 919 F.2d 688, 692-93, 16 USPQ2d 1897, 1901 (Fed. Cir. 1990) (in banc).

11) *In re Baird*, 16 F.3d 380, 382, 29 USPQ2d 1550, 1552 (Fed. Cir. 1994).

12) *In re Jones*, 958 F.2d 347, 350, 21 USPQ2d 1941, 1943 (Fed. Cir. 1992); see also *In re Deuel*, 51 F.3d 1552, 1559, 34 USPQ2d 1210, 1215 (Fed. Cir. 1995); *In re Bell*, 991 F.2d 781, 784, 26 USPQ2d 1529, 1531 (Fed. Cir. 1993).

13) Cf. *In re Napier*, 55 F.3d, 610, 613, 34 USPQ2d 1782, 1784 (Fed. Cir. 1995): "Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching, suggestion or incentive supporting the combination."; *In re Geiger*, 815 F.2d 686, 688, 2 USPQ2d 1276, 1278 (Fed. Cir. 1987); *In re Laskowski*, 871 F.2d 115, 117, 10 USPQ2d 1397, 1399 (Fed. Cir. 1989): "[t]he mere fact that the prior art could be so modified would not have made the modification obvious unless the prior art suggested the desirability of the modification", quoting *In re Gordon*, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984).

14) *In re Sernaker*, 702 F.2d 989, 994-95, 217 USPQ 1, 5-6 (Fed. Cir. 1983).

to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background the obviousness or nonobviousness of the subject matter is determined. Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented.”¹⁵⁾ Noting that the analysis under 35 U.S.C. §103 “need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ,”¹⁶⁾ the Court cautioned, however, that “rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.”¹⁷⁾ The Court also emphasized the need “to determine whether there was an apparent reason to combine known elements in the fashion claimed by the patent at issue.”¹⁸⁾ To establish a prima facie case of obviousness it is, therefore, essential that there be some motivation or suggestion to make the claimed invention in light of the prior art teachings.¹⁹⁾ “[A] proper analysis under §103 requires, inter alia, consideration of ... whether the prior art would have suggested to those of ordinary skill in the art that they should make the claimed composition or device, or carry out the claimed process.”²⁰⁾

In light of the foregoing analysis, as well as the arguments presented by applicants in their previous papers,²¹⁾ the Examiner’s arguments are not deemed to amount to the articulated reasoning with some rational underpinning which is necessary to support the legal conclusion of obviousness.

CONCLUSION

The Examiner’s rejection is deemed to be based upon clear legal and factual deficiencies. Little, if any, interpretation of the claims or of prior art teachings is required to conclude that the rejection should be withdrawn. Favorable action is respectfully requested.

15) *Graham v. John Deere*, 383 U.S. 1, at 17 – 18, 148 USPQ 459 (1966). Cf. *KSR Int’l v. Teleflex, Inc.*, 550 U.S. ____ (2007), Slip op. at 2.

16) *KSR Int’l v. Teleflex Inc.*, 127 S.Ct. 1727, ___, 82 USPQ2d 1385, 1397 (2007).

17) *KSR Int’l v. Teleflex, Inc.*, 127 S.Ct. at ___, 82 USPQ2d at 1396 (quoting *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006)).

18) *KSR Int’l v. Teleflex, Inc.*, 550 U.S. ____ (2007), Slip op. at 14.

19) See, e.g., *In re Brouwer*, 77 F.3d 422, 425, 37 USPQ2d 1663, 1666 (Fed. Cir. 1996), *In re Gordon*, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984)).

20) *In re Vaec*, 947 F.2d 488, 493, 20 USPQ2d 1438, 1442 (Fed. Cir. 1991).

21) Applicants’ papers dated October 03, 2007, and dated April 09, 2007, which are herewith incorporated by reference.